

Remarks

Reconsideration of this application is respectfully requested in view of the foregoing amendments and the following remarks. The Office Action dated March 22, 2005, has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

Summary of the Response

By the foregoing amendments, claim 1 has been amended. Support for this amendment may be found on page 18, lines 11-14 of the specification. No new matter has been added. Claims 4-6 have been previously canceled. Thus, claims 1-3 are currently pending in the application and subject to examination.

In the Office Action mailed on March 22, 2005, claims 1-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication 2001/0023185 to Hakkinen et al. in view of U.S. Patent No. 5,933,782 to Nakano et al. To the extent that the rejections remain applicable to the claims currently pending, Applicants hereby traverse the rejections, as follows.

Claim 1 Recites Patentable Subject Matter

Regarding claim 1, Applicants respectfully submit that nothing in the prior art, taken alone or in combination, discloses or suggests at least the feature of the present invention of a radio base station "transmitting, when the radio base station starts a communication with a mobile station by the space division multiplex method, an instruction to stop performing a diversity reception to the mobile station," as recited in amended claim 1. This feature of the present invention enables elimination of the

deterioration of the communication quality, which occurs due to the diversity reception at the mobile station during a communication by the space division multiplex method.

Applicants respectfully submit that the present invention, as recited in amended claim 1, solves among other problems, the problem that arises when a mobile station performs a diversity reception while communicating with a radio base station by the space division multiplex, and one of a plurality of antennas provided in the mobile station receives an array antenna pattern being a directional pattern. At the same time, a second antenna may receive an array antenna pattern for another mobile station by interference. In such a case, the second antenna may be selected by mistake depending on the reception signal level. This leads to a problem of deterioration of the communication quality such as an increase in the bit error rate. The present invention, as recited in claim 1, solves this problem of deterioration of communication quality.

Applicants respectfully submit that nothing in the prior art, taken alone or in combination, discloses or suggests the feature of “transmitting, when the radio base station starts a communication with a mobile station by the space division multiplex method, an instruction to stop performing a diversity reception to the mobile station,” as recited in amended claim 1.

Hakkinen et al. discloses the basic construction for a connection for which the space is divided by beams. See, paragraphs 0015 and 0022, stating respectively that “the transmission and reception of the base station takes place in narrow beams, each of which has a specific base station transceiver unit,” and that “the base station transceiver generally comprises several reception antennas for space diversity reception.” Furthermore, in paragraph 0027, Hakkinen et al. states that “the connection

between the subscriber terminal equipment 37 and the base stations 33 to 36 is established...,” thereby indicating that a mobile station connects with a plurality of base stations by dividing the space by beams.

Nothing in Hakkinen et al., therefore, discloses or suggests the feature of the present invention of, “transmitting, when the radio base station starts a communication with a mobile station by the space division multiplex method, an instruction to stop performing a diversity reception to the mobile station,” as recited in amended claim 1.

Applicants respectfully submit that Nakano et al. fails to correct this deficiency in Hakkinen et al. Nakano et al. relates to transmission power control during a communication with a site diversity. Fig. 16 of Nakano et al., cited by the Examiner, shows operations in a handoff with a site diversity, for a mobile station, from base station 1 to base station 2. Specifically, when a mobile station, while being connected to base station 1 during a period that is not the site diversity period, receives notification that the site diversity has started, the mobile station is connected to base station 1 and base station 2. Then, when the mobile station receives notification that the site diversity has ended, the mobile station is connected to base station 2.

However, nothing in Nakano et al. corrects the deficiency of Hakkinen et al., of failing to disclose or suggest at least the feature of the present invention of “transmitting, when the radio base station starts a communication with a mobile station by the space division multiplex method, an instruction to stop performing a diversity reception to the mobile station,” as recited in claim 1 as amended.

For at least these reasons, Applicants submit that claim 1 is allowable over the cited prior art.

Claims 2 and 3 Recite Patentable Subject Matter

As claim 1 is allowable, Applicants respectfully submit that claims 2 and 3, each of which depends from allowable claim 1, are allowable over the cited prior art for at least the same reasons as allowable claim 1.

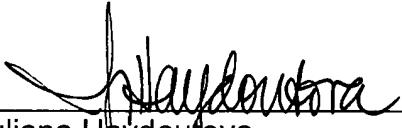
Conclusion

In view of the above, Applicants respectfully submit that each of claims 1-3 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicants also submit that the subject matter is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art, and therefore respectfully request that claims 1-3 be found allowable and that this application be passed to issue.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is encouraged to telephone the undersigned representative at the number listed below.

In the event this paper has not been timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, referring to client-matter number 101201-00013.

Respectfully submitted,



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